

## CLAIMS

I/We claim:

- [c1]           1.     The main illuminant determinative method under multi-light environment, comprising the steps of :  
                  using at least two sensing regions of a light sensor device to measure at least two illumination values of light source of environment at different time points , and determining a main light source of the environment according to said at least two illumination values.
- [c2]           2.     The main illuminant determinative method under multi-light environment according to claim 1, wherein the light sensor device is CMOS sensor device.
- [c3]           3.     The main illuminant determinative method under multi-light environment according to claim 2, wherein said main light source is determined as an artificial light source, a length of time exposure of said light sensor device is said integer times of 1/100 second or 1/120 second.
- [c4]           4.     The main illuminant determinative method under multi-light environment according to claim 2, wherein said main light source is determined as a stable light source if a variance ratio of a difference between said at least two illumination values are smaller than a largest variance of a natural light source.
- [c5]           5.     The main illuminant determinative method under multi-light environment according to claim 2, wherein said variance ratio of a difference said at least two illumination values is greater than said greatest value of a natural light source and greater than said smallest value of an artificial light source, then said light source of environment is determined as an artificial light source.

[c6]           6.     The main illuminant determinative method under multi-light environment according to claim 5, further comprising a step of determining a varying period according to said at least two illumination values.

[c7]           7.     The main illuminant determinative method under multi-light environment according to claim 2, wherein said main light source is determined as a stable light source if a variance ratio of a difference between said at least two illumination values are greater than said greatest variance of a natural light source and smaller than said smallest variance of an artificial value, and said difference of two illumination values with one of an illumination ratio of said two illumination values are smaller than a predetermining value.

[c8]           8.     The main illuminant determinative method under multi-light environment according to claim 2, wherein said main light source is determined as an artificial light source if a variance ratio of a difference between said at least two illumination values are greater than said greatest variance value of a natural light source and smaller than said smallest variance value of an artificial value, and said difference of two illumination values with a selective illumination ratio of two illumination values are greater than a predetermining value.

[c9]           9.     The main illuminant determinative method under multi-light environment according to claim 8, further comprising a step of determining a varying period according to said at least two illumination values.

[c10]          10.    The main illuminant determinative method under multi-light environment according to claim 1, wherein said light sensor device is used for an captured image instrument, said images capture instrument come with a monitor, said light sensor device is to capture an image data according to said length of time exposure, then said monitor display an image in accordance with said image data.

- [c11] 11. The main illuminant determinative method under multi-light, environment comprising the steps of :  
using a light sensor device to measure at least two illumination values of light source of environment at different time points; and  
determining a main light source of the environment according to said at least two illumination values.
- [c12] 12. The main illuminant determinative method under multi-light environment according to claim 11, wherein said light sensor device is CCD.
- [c13] 13. The main illuminant determinative method under multi-light environment according to claim 12, wherein said main light source is determined as a stable light source if a variance ratio of a difference between said at least two illumination values are smaller than said largest variance of a natural light source.
- [c14] 14. The main illuminant determinative method under multi-light environment according to claim 12, wherein said main light source is determined as an artificial light source if a variance ratio of a difference between said at least two illumination values are greater than said greatest variance value of a natural light source and greater than said smallest variance value of an artificial light source.
- [c15] 15. The main illuminant determinative method under multi-light environment according to claim 12, wherein said main light source is determined as a stable light source if a variance ratio of a difference between said at least two illumination values are greater than said greatest variance value of a natural light source and smaller than said smallest variance value of an artificial value, and said different of two illumination values with one of an illumination ratio value under said two illuminations value are smaller than a predetermining value.

[c16] 16. The main illuminant determinative method under multi-light environment according to claim 12, wherein said main light source is determined as an artificial light source if a variance ratio of a difference between said at least two illumination values are greater than said greatest variance value of a natural light source and smaller than said smallest variance value of an artificial value, and said difference of two illumination values with a selective illumination ratio value of two illuminations values are greater than a predetermining value.

[c17] 17. The main illuminant determinative method under multi-light environment, comprising the steps of :

using a light sensor device to measure at least two illumination values of light source of environment at different time points; and  
comparing a variance ratio of a difference between said at least two illumination values with a first threshold value;  
comparing a variance ratio of a difference between said at least two illumination values with a second threshold value; and  
comparing a variance ratio of a difference between said at least two illumination values with a third threshold value.

[c18] 18. The main illuminant determinative method under multi-light environment according to claim 17, wherein said the light sensor device is CMOS sensor device.

[c19] 19. The main illuminant determinative method under multi-light environment according to claim 17, wherein said main light source is determined as an artificial light source, a length of time exposure of said light sensor device is said integer times of 1/100 second or 1/120 second.

[c20] 20. The main illuminant determinative method under multi-light environment according to claim 17, wherein said first threshold value is said greatest variance value of a natural light source.

[c21] 21. The main illuminant determinative method under multi-light environment according to claim 17, wherein said second threshold value is said smallest variance value of an artificial light source.

[c22] 22. The main illuminant determinative method under multi-light environment according to claim 17, wherein said third threshold value is determined according to said tolerable range of said light sensor device.